



EVERFOCUS

Dual Power High Resolution Vandal Proof
Weather Resistant 3-Axis IR Dome Camera

Operation Instructions

Model No. **EHD363**

Please read this manual first for correct installation and operation. This manual should be retained for future reference. The information in this manual was current when published. The manufacturer reserves the right to revise and improve its products. All specifications are therefore subject to change without notice.

PRECAUTIONS

1. Do not install the camera near electric or magnetic fields.

Install the camera away from TV/radio transmitters, magnets, electric motors, transformers and audio speakers since the electromagnetic fields generated from these devices may distort the video image or otherwise interfere with camera operation.

2. Never disassemble the camera beyond the recommendations in this manual nor introduce materials other than those recommended herein.

Improper disassembly or introduction of corrosive materials may result in equipment failure or other damage.

3. Try to avoid facing the camera toward the sun.

In some circumstances, direct sunlight may cause permanent damage to the sensor and/or internal circuits, as well as creating unbalanced illumination beyond the capability of the camera to compensate.

4. Keep the power cord away from water and other liquids and never touch the power cord with wet hands.

Touching a wet power cord with your hands or touching the power cord with wet hands may result in electric shock.

5. Never install the camera in areas exposed to oil, gas or solvents.

Oil, gas or solvents may result in equipment failure, electric shock or, in extreme cases, fire.

6. Cleaning

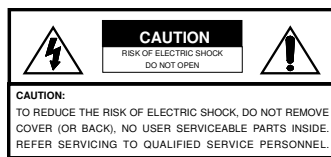
For cameras with interchangeable lenses, do not touch the surface of the sensor directly with the hands. Use lens tissue or a cotton tipped applicator and ethanol to clean the sensor and the camera lens. Use a damp soft cloth to remove any dirt from the camera body. Please do not use complex solvents, corrosive or abrasive agents for cleaning of any part of the camera.

7. Do not operate the camera beyond the specified temperature, humidity or power source ratings. This camera is suitable for indoor and outdoor operation.

Use the camera at temperatures within -10°C to +50°C (14°F to 122°F) and in an IP66 compliant environment; this device is not rated as submersible. The input power source is 12VDC or AC24V. **Be sure to connect the proper voltage, as too high a voltage will likely cause the camera to fail, and such damage is not covered by the warranty. The use of properly fused or Class 2 power limited type supplies is highly recommended. Regulated supply is required for 12VDC operation.**

8. Mounting

Use care in selecting a solid mounting surface which will support the weight of the camera plus any wind, snow, ice or other loading, and securely attach the camera to the mounting surface using screws and anchors which will properly support the camera. If necessary (e.g. when mounting to drop ceilings) use a safety wire to provide additional support for the camera.



OVERVIEW

The EHD363 is an outdoor, vandal resistant 3-axis IR dome camera which utilizes a Sony 1/3" 960H Exview HAD CCD Sensor and enhanced Effio-E DSP to provide high resolution 700TVL color video for security surveillance applications. Advanced functions including Digital WDR/ATR (Adaptive Tone Reproduction), 2D-NR (2D Noise Reduction) and Anti CR (Anti Color Rolling) insure optimum image quality under low or unbalanced lighting conditions. Vandal Proof materials and an IP66 weather resistant housing allow reliable operation in outdoor and indoor environments. True day/night operation combined with 30m (~98ft.) range high efficiency IR LEDs makes the EHD363 suitable for a wide range of day and night surveillance situations. Plus, dual voltage 12VDC/24VAC operation, 3-axis mechanical design and built-in f=3.7~12mm varifocal auto iris lens bring flexibility to installation and field of view adjustment.

FEATURES

- Sony 1/3" 960H EXview HAD II high resolution CCD sensor for 700TVL images
- Employs Sony Enhanced Effio-E Digital Signal Processor (DSP) chip-set for advanced image processing.
- Built-in Auto Gain Control (AGC), Auto Tracing White Balance (ATW) enhance image quality
- Advanced DSP functions enhance image quality: Digital WDR/ATR (Adaptive Tone Reproduction), 2D-NR (2D Noise Reduction), Anti CR (Anti Color Rolling)
- Varifocal DC iris 3.7~12mm lens and 3-Axis design for flexible field of view adjustment
- Eleven high efficiency IR LEDs with 30m (~98ft.) range in for low/no light applications
- True day/night auto switching for best day time color and low light performance
- Vandal proof to withstand impact of a 10 pound sledgehammer.

- Weather resistant, IP66 rated
- Dual power: 12VDC/24VAC

PACKAGE CONTENTS

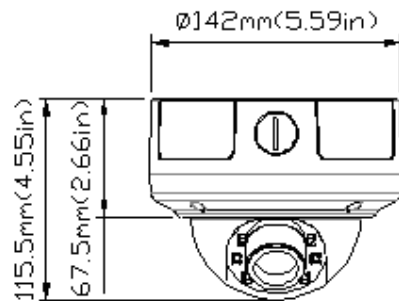
- Camera Unit x 1
- Mounting kit includes:
 - Screws x 4
 - Security wrench for housing screws x 1
 - Expanding Anchors x 4
 - Washers x 4
- Operation Instructions (this document) x 1
- Weatherproof bushing x 1
- Power cable x 1
- Video cable x 1
- Power adapter pigtail (for NTSC model only) x 1
- Mounting template x 1

SPECIFICATIONS

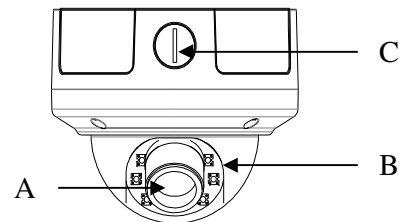
Pickup Device	SONY 1/3" 960H EXview HAD II CCD High Resolution
Video Format	NTSC
Picture Elements	976 x 494
Horizontal Resolution	700 TV line
Sensitivity	0.01Lux / F1.4; 0Lux / IR
S/N Ratio	More than 54 dB
Electronic Shutter	1/60s~1/100,000s
Video Output	BNC-F 1.0Vp-p 75Ω
Gamma Correction	0.45
Lens Type	Vari-Focal 3.7~12mm / F1.4 DC Drive Auto Iris Lens
Day/Night	True day/night with motorized IR cut filter
Gain Control	Automatic
White Balance	ATW (1800°K~10500°K) with Anti-CR Function
Digital WDR	ATR On (Luminance and Contrast = High)
Noise Reduction	2-D DNR (C Level 4, Y Level 4)
Sync. Mode	Internal Sync.
IR LED	11 Units High Efficiency IR LED
IR Wavelength	850nm
IR Distance	30m (~98ft.) nominal; depends on environment
Weather Resistant	IP 66
Vandal Proof	IK10
Power Source	12VDC or 24VAC
Power Consumption	283mA @ 12VDC, 8W @ 24VAC

Operating Temperature	-10°C~50°C / 14°F~122°F
Dimensions (O.D. x H)	142mm x 115.5mm / 5.6" x 4.55"
Weight	979 g / 2.16 lbs
Certifications	CE / FCC

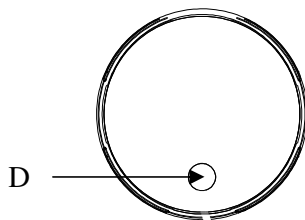
DIMENSIONS



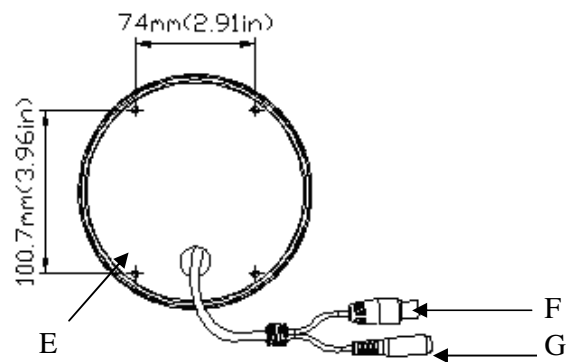
Dimensions



Front View



Bottom View



Bottom View

- A. Lens
- B. IR-LED
- C. Side conduit entry
- D. Back conduit entry

- E. Mounting holes
- F. BNC Connector
- G. DC Connector

INSTALLATION INSTRUCTIONS

Drill the Holes

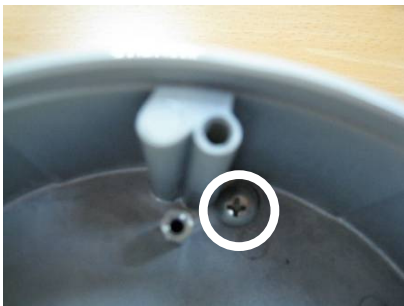
1. Locate the desired mounting location; position housing with camera pointed generally in the desired direction and mark location.
2. Use template to fix hole locations. Drill 4 holes for mounting screws (or anchors and insert plastic anchors into holes after drilling as required).

Mounting Steps

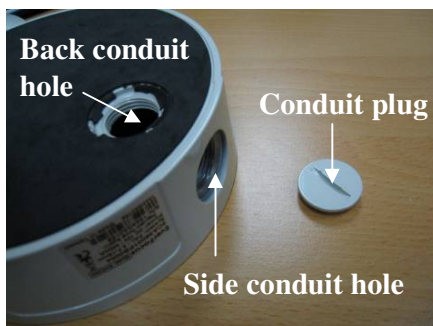
1. Use the security wrench provided to loosen the 4 screws holding the dome cover.
2. Remove the dome cover. **(IF REAR WIRE MUST BE REMOVED/RELOCATED, SEE STEPS 4~8)** Attach the camera body to the mounting surface with the mounting screws provided



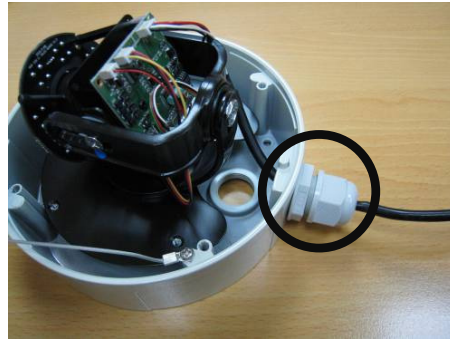
3. Tighten the 4 mounting screws to secure the camera body to the mounting surface.



4. If you need to wire cable through side conduit hole, use a coin to remove the conduit plug; save the plug as it will be used to close the rear conduit hole.



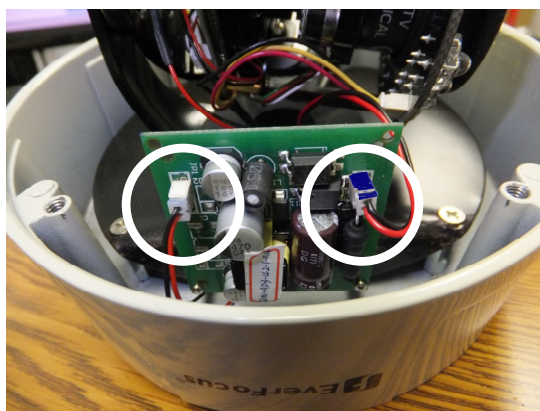
5. Disconnect the power and video wire from the camera board end of the wire (1x 4 pin white connector) and the 2 power wires from the power board attached to the base plate (1 x 2 pin connector with blue marking and 1 x 2 pin connector with white color). Gently pull the wires out from under the plate until they are free. Using wrench or pliers, remove the weather tight bushing from the rear conduit hole. Using the plug removed in step 3 above, close the rear conduit hole (additional caulk or other sealant recommended).



6. Pass the camera end of the power/video cable through side conduit hole. Using wrench or pliers, carefully tighten the weather tight bushing into the side conduit hole.

7. (Optional) Pass the power/video wires under the base plate and up through the center hole.

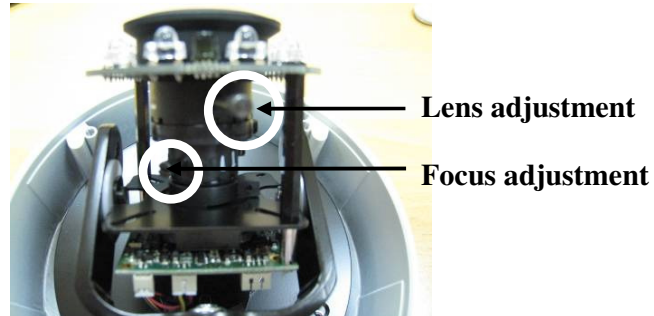
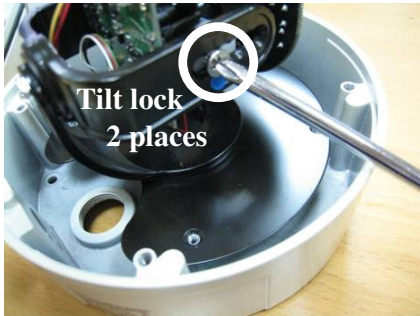
8. Position the power/video wires so that they don't interfere with the camera module and carefully attach the 4 pin white connector to the camera board, being sure to position the connector so it fits properly onto the tiny pins within. Next, attach the blue 2 pin connector and the white 2 pin connector to the matching color receptacles on the power board. **NOTE: the 2 pin blue connector goes into the receptacle marked in blue on the power board.** Failure to properly attach these connectors may permanently damage the camera.



General Connection and Setup

1. Connect the power cord to DC 12V or AC 24V power supply
2. Use 75 ohm type coaxial cable to connect the camera to a monitor or DVR.

3. Loosen the screws which lock the tilt mechanism. Rotate the pan and tilt mechanisms to point the camera in the desired direction. Rotate the camera module on its axis if necessary to align the image 'upright'. Loosen the lens adjusting screws and adjust the lens to obtain the desired field of view and focus.



4. Lock the lens and tilt screws. Put the dome cover back and align the clear window in the dome cover with the lens. Attach the dome cover to dome base with the 4 mounting screws.

NOTE: The cover only goes on in ONE direction. There is a key and slot; if not aligned, cover will not close properly.

NOTE: If you move the camera module, it is necessary to loosen the dome and liner and **reposition the liner so the lens points out through the slot**, and the rubber seal presses onto the clear part of the dome and not the liner. Loosen 4 Philips screws, reposition liner, then **TIGHTEN** four cover attachment screws (else seal and vandal resistance is compromised).

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August 2013